

CLAIMS:

Please amend the claims as follows.

1. (Currently amended) A computer system comprising:
a plurality of shelves, each shelf ~~having~~ including a carrier ~~for~~ configured to removably ~~receiving~~ receive a plurality of information processing modules and ~~[[a]] two~~ switching ~~module~~ modules, ~~and an interconnection member for providing connections between the information processing modules and the switching module;~~
wherein the shelves are logically connected into a plurality of stacks, wherein the switching modules of the respective shelves in each stack being interconnected in ~~[[a]]~~ at least one logical stacking configuration; and
the computer system further comprising a master shelf ~~having~~ including a carrier ~~for~~ configured to removably ~~receiving~~ receive two master switching ~~module~~ modules, wherein each of the master switching ~~module~~ modules is connected into each stack as a common master switch for all of the stacks, wherein a first master switching module is connected to a first switching module of a first shelf and to a first switching module of a last shelf in each of the stacks, and wherein a second master switching module is connected to a second switching module of a first shelf and to a second switching module of a last shelf in each of the stacks.
2. (Currently amended) The computer system of claim 1, wherein ~~the~~ each logical stacking configuration is a closed loop stacking configuration.
3. (Currently amended) The computer system of claim 1, wherein each switching module other than the master switching ~~module~~ modules is operable as a slave switching module responsive to the corresponding master ~~masters~~ switching module.

4. (Currently amended) The computer system of claim 3, wherein the interconnected switching modules and corresponding master switching module are operable as a single distributed switch.
5. (Currently amended) The computer system of claim 1, wherein each of the master switching ~~module~~ modules provides a single ingress/egress point for data transfer to/from the computer system.
6. (Currently amended) The computer system of claim 1, wherein each shelf includes an interconnection member configured to provide connections between the information processing modules and the switching modules, wherein the information processing modules of each shelf are located at a first side of the interconnections member and the switching ~~module~~ modules are located at the second side of the interconnections member and wherein a power supply module for providing power to the modules is removably received in the shelf located at the second side of the interconnections member.
7. (Currently amended) The computer system of claim 1, wherein the shelf of the master switching ~~module~~ modules has no information processing modules and has a power supply module for providing power to the master switching modules.
8. (Currently amended) The computer system of claim 7, wherein the master switching ~~module~~ modules are located at a first side of the interconnections member and the power supply module is located at a second side of the interconnections member.
9. (Currently amended) The computer system of claim 1, wherein each shelf has two service processing ~~module~~ modules removably received therein for providing shelf level service functions to the modules of the shelf.

10. (Currently amended) The computer system of claim 9, wherein each of the switching ~~module~~ modules of a shelf comprises one of the service processing ~~module~~ modules for ~~each~~ the shelf.

11. (Currently amended) The computer system of claim 9, wherein each of the master switching ~~module~~ modules comprises ~~the~~ one of service processing ~~module~~ modules for its shelf.

12. (Cancelled)

13. (Currently amended) The computer system of claim ~~[[11]]~~1, wherein both switching modules of each shelf are connected into a common logical stacking arrangement.

14. (Currently amended) The computer system of claim ~~[[12]]~~1, wherein each switching module of each shelf is connected into a different logical stacking arrangement to the other switching module of that shelf.

15. (Original) The computer system of claim 14, wherein each shelf is connected into two logical stacking arrangements, each switching module of the shelf being connected into a different one of the logical stacking arrangements, and wherein the each logical stacking arrangements provides equivalent connectivity between the shelves as the other logical stacking arrangement.

16. (Currently amended) The computer system of claim ~~[[12]]~~1, wherein each switching module of a given shelf is operable to replicate the functionality of the other switching module of that shelf.

17. (Currently amended) The computer system of claim ~~[[12]]~~1, wherein one switching module of each shelf is operable as a shelf level master switching module and

wherein the other switching module of that shelf is operable as a shelf level slave switching module.

18. (Currently amended) The computer system of claim [[12]]1, wherein each switching module of a given shelf is interconnected with the other switching module of that shelf.

19. (Currently amended) The computer system of claim 18, wherein the inter-switching module interconnection is made through [[the]] an interconnections member of the shelf.

20. (Cancelled)

21. (Currently amended) The computer system of claim [[20]]1, ~~as dependent from at least claim 14,~~ wherein each switching module of each shelf is connected into a different logical stacking arrangement to the other switching module of that shelf, and wherein each master switching module is connected into a separate one of the logical stacking arrangements.

22. (Currently amended) The computer system of claim [[20]]1, wherein each master switching module is interconnected with the other master switching module.

23. (Currently amended) The computer system of claim 22, wherein the inter-master switching module interconnection is made through [[the]] an interconnections member of the shelf.

24. (Currently amended) The computer system of claim [[20]]1, wherein the two master switching are operable in master-slave relationship relative one another.

25. (Previously presented) The computer system of claim 1, wherein each switching module comprises at least one forwarding element for performing a forwarding operation and a respective controlling element for controlling the forwarding element.

26. (Original) The computer system of claim 25, wherein each switching module comprises at least one switch fabric chip and a controlling microprocessor, and wherein the functionality of each forwarding element is performed by a switch fabric chip and the functionality of the controlling element is performed by the same switch fabric chip and the controlling microprocessor in combination.

27. (Original) The computer system of claim 25, wherein each controlling element is aware of the topography of the stack.

28. (Original) The computer system of claim 27, wherein each controlling element is operable to control the operation of the forwarding element to cause a unicast data element to be forwarded by its respective forwarding element using a shortest transmission path to its target.

29. (Original) The computer system of claim 27, wherein each controlling element is operable to control the operation of the forwarding element to cause a multicast or broadcast data element to be forwarded once around the stack in a given direction.

30. (Original) The computer system of claim 25, wherein each switching module is content aware.

31. (Original) The computer system of claim 30, wherein the controlling element is operable to study a transmitted data element to determine a path to destination based on the content of that data element.

32-40. (Cancelled)

41. (Currently amended) A computer system comprising:

a plurality of shelves, each shelf including a carrier configured to removably receive a plurality of information processing modules and a switching module, and an interconnection member configured to provide connections between the information processing modules and the switching module;

wherein the shelves are logically connected into a plurality of stacks, the switching modules of the respective shelves in each stack being interconnected in a logical stacking configuration, wherein the logical stacking configuration is a closed loop stacking configuration; and

the computer system further comprising a master shelf including a carrier configured to removably receive a master switching module, wherein the master switching module is connected into each stack as a common master switch for all of the stacks;

~~The computer system of claim 2,~~ wherein only a first shelf and a last shelf in each of the plurality of stacks are directly connected ~~is coupled~~ to the master switching module.

42. (Previously presented) A computer system comprising:

a plurality of shelves, each shelf including a carrier configured to removably receive a plurality of information processing modules and two switching modules, and an interconnection member configured to provide connections between the information processing modules and the switching modules;

wherein the shelves are logically connected into a plurality of stacks, wherein the switching modules of the respective shelves in each stack being interconnected in two separate logical stacking configuration, wherein a first switching module of each shelf is connected into a separate logical stacking arrangement than a second switching module of that shelf; and

the computer system further comprising a master shelf including a carrier configured to removably receive two master switching modules, wherein each of the master switching modules is connected into each stack as a common master switch for all of the stacks, wherein a first master switching module is connected to a first switching

module of a first shelf and to a first switching module of a last shelf in each of the stacks, and wherein a second master switching module is connected to a second switching module of a first shelf and to a second switching module of a last shelf in each of the stacks.